

AMENDMENTS TO THE CLAIMS

The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Currently Amended) A method of transmitting data comprising the steps of:

channel coding an encoder packet to produce a channel coded encoder packet; [[and]]

puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission rate at which the first encoder sub-packet is to be transmitted, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver, the puncturing including removing bits from the channel coded encoder packet and the repeating including duplicating bits in the channel coded encoder packet;

transmitting the first encoder sub-packet to a receiver;
receiving a NACK message indicating that the transmission of the first encoder sub-packet was not successfully received at the receiver;

puncturing and/or repeating the channel coded encoder packet to produce a second encoder sub-packet having a second size based on a size of

the encoder packet and a second data transmission rate at which the second encoder sub-packet is to be transmitted, the second size being different from the first, but the second encoder sub-packet being representative of the same data as the first encoder subpacket; and

transmitting the second encoder sub-packet to the receiver.

2. (Original) The method of claim 1, wherein the first data transmission rate is based on first channel conditions measured at a receiver to which the first encoder sub-packet is intended.

3. (Original) The method of claim 1, wherein the first encoder sub-packet has a format which allows the first encoder sub-packet to be soft combined with a second encoder sub-packet derived from the same encoder packet as the first encoder sub-packet.

4. (Original) The method of claim 3, wherein the first encoder sub-packet is of a different size than the second encoder sub-packet.

5. (Original) The method of claim 3, wherein the first encoder sub-packet is of an identical size than the second encoder sub-packet.

6. (Original) The method of claim 1 comprising the additional step of:

adding a first encoder packet size identifier to the first encoder sub-packet indicating the size of the encoder packet from which the first encoder sub-packet was derived.

7. (Original) The method of claim 6 comprising the additional step of: transmitting the first encoder sub-packet with the first encoder packet size identifier at the first data transmission rate.

8. (Original) The method of claim 7, wherein the first encoder sub-packet with the first encoder packet size identifier is modulated using a modulation scheme based on the first data transmission rate.

9. (Original) The method of claim 7 comprising the additional step of: prior to the step of transmitting the first encoder sub-packet, transmitting a rate indication message to a receiver to which the first encoder sub-packet is intended indicating the first data transmission rate.

10. (Original) The method of claim 1 comprising the additional step of: adding an encoder sub-packet format identifier to the first encoder sub-packet indicating a first format of the first encoder sub-packet.

11. (Currently Amended) The method of claim 10, wherein comprising ~~the additional step of:~~

~~transmitting~~ the first encoder sub-packet is transmitted with the first encoder sub-packet format identifier at the first data transmission rate.

12. (Original) The method of claim 11, wherein the first encoder sub-packet with the first encoder sub-packet format identifier is modulated using a modulation scheme based on the first data transmission rate.

13. (Original) The method of claim 11 comprising the additional step of:

prior to the step of transmitting the encoder sub-packet, transmitting a first rate indication message to a receiver to which the first encoder sub-packet is intended indicating the first data transmission rate.

14. (Previously Presented) The method of claim 1 comprising the additional step of:

prior to the step of puncturing and/or repeating the channel coded encoder packet, receiving the first rate indication message from a receiver to which the encoder packet is intended indicating a data rate based on first channel conditions measured at the receiver.

15. (Cancelled).

16. (Previously Presented) The method of claim 14 comprising the additional step of:

transmitting a new rate message to the intended receiver indicating the first data transmission rate.

17. (Canceled).

18. (Currently Amended) A method of receiving a data transmission comprising the steps of:

receiving at a receiver a message indicating a first data transmission rate;

receiving a first encoder sub-packet with a first encoder packet size identifier indicating a size of the first encoder sub-packet, the first encoder sub-packet being generated by puncturing and/or repeating a channel coded encoder packet, the puncturing including removing bits from the channel coded encoder packet and the repeating including duplicating bits in the channel coded encoder packet; [[and]]

decoding the first encoder sub-packet using the first encoder packet size identifier and the first data transmission rate, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver;

transmitting a negative acknowledgement message and a rate indication message if the first encoder sub-packet cannot be successfully decoded, the rate indication message indicating current channel conditions at the receiver;
receiving a message indicating a second data transmission rate;
receiving a second encoder sub-packet with a second encoder packet size identifier indicating a size of the second encoder sub-packet, the size of the second encoder sub-packet being different from the first, but the second encoder sub-packet being representative of the same data as the first encoder sub-packet; and
decoding the second encoder sub-packet using the second data transmission rate, the second encoder packet size identifier and the first encoder sub-packet.

19. – 20. (Canceled).

21. (Currently Amended) A method of receiving a data transmission comprising the steps of:

receiving at a receiver a message indicating a first data transmission rate;

receiving a first encoder sub-packet with a first encoder sub-packet format identifier indicating a format of the first encoder sub-packet, the first encoder sub-packet being generated by puncturing and/or repeating a channel

coded encoder packet, the puncturing including removing bits from the channel coded encoder packet and the repeating including duplicating bits in the channel coded encoder packet; [[and]]

decoding the first encoder sub-packet using the first encoder sub-packet format identifier and the first data transmission rate, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver;

transmitting a negative acknowledgement message and a rate indication message if the first encoder sub-packet can not be successfully decoded, the rate indication message indicating current channel conditions at the receiver;

receiving a message indicating a second data transmission rate;

receiving a second encoder sub-packet with a second encoder sub-packet format identifier encoder sub-packet indicating a format of the second encoder sub-packet, a size of the second encoder sub-packet being different from a size of the first encoder sub-packet, but the second encoder sub-packet being representative of the same data as the first encoder sub-packet; and

decoding the second encoder sub-packet using the second data transmission rate, the second encoder sub-packet format identifier and the first encoder sub-packet.

22. – 23. (Canceled).

24. (Currently Amended) A method of transmitting data comprising the steps of:

channel coding an encoder packet to produce a channel coded encoder packet; [[and]]

puncturing and/or repeating the channel coded encoder packet to produce a first encoder sub-packet having a first size based on a size of the encoder packet and a first data transmission rate at which the first encoder sub-packet is to be transmitted and including a first encoder packet size identifier to the first encoder sub-packet indicating the size of the encoder packet from which the first encoder sub-packet was derived, wherein the first data transmission rate is different from and based on a data rate for transmitting the first encoder sub-packet indicated in a first rate indication message from a receiver, the puncturing including removing bits from the channel coded encoder packet and the repeating including duplicating bits in the channel coded encoder packet;

transmitting the first encoder sub-packet to a receiver;

receiving a NACK message indicating that the transmission of the first encoder sub-packet was not successfully received at the receiver;

puncturing and/or repeating the channel coded encoder packet to produce a second encoder sub-packet having a second size based on a size of the encoder packet and a second data transmission rate at which the second encoder sub-packet is to be transmitted, the second size being different from

the first, but the second encoder sub-packet being representative of the same
data as the first encoder subpacket; and
transmitting the second encoder sub-packet to the receiver.